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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/688,783 | 10/17/2003 | Calum E. MacAulay | 1174-4-8 | 9550 |
| 996 | 7590 | 08/17/2006 | EXAMINER | |
| GRAYBEAL, JACKSON, HALEY LLP 155 - 108TH AVENUE NE SUITE 350 BELLEVUE, WA 98004-5901 | | | LEUBECKER, JOHN P | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3739 | |

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/688,783 | MACAULAY ET AL. | |
| | Examiner | Art Unit | |
| | John P. Leubecker | 3739 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 17 October 2003.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 31-37 and 48 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 31,33,35,37 is/are rejected.
 7) Claim(s) 32,34,36 and 48 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 4/12/04.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

Election/Restrictions

1. Applicant's election (although Applicant doesn't specifically elect Group I, cancellation of the claims of Group II is taken as a selection of Group I) of Group I in the reply filed on June 9, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The disclosure is objected to because of the following informalities: the continuation data in the first paragraph of the specification (as amended on April 12, 2004) needs to be updated (i.e., parent application patent number).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 35, term "the pixels" (line 3) lacks antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 31, 35 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg (U.S. Pat. 5,815,624).

Referring mainly to Figures 3 and 4, Rosenberg discloses a method of illuminating a target including the steps of transmitting light (e.g. 47,49,51, Fig.3) for a light source to a proximal end (Fig.3) of a light guide bundle (54) via a spatial light modulator (46) wherein the spatial light modulator transmits the light substantially only to cores of light guides (48,50,52) in the light guide bundle (col.4, lines 43-45), transmitting the light from the proximal end of the light guide bundle to a distal end (Fig.4) of the light guide bundle and emitting the light from the distal end of the light guide bundle, and illuminating the target with the light emitted from the distal end of the light guide bundle (col.5, lines 23-30). As to claim 35, note that the light source will illuminate a substantial portion (e.g. all) of the pixels of the spatial light modulator (46), wherein the centers of the lenslets (42) correspond to pixels of an on-state and areas between lenslets (42) (best shown in Figure 2A) correspond to off-state pixels. As to claim 37, note that light emanating from the distal end adjacent light guides do not “interfere” with each other, as shown by the lines of light in Figure 4 emanating from light guides (48, 50 and 52) and suggested by the respective alignment of the light guides and lenslets (58,60 and 62) (col.5, lines 25-29).

7. Claims 31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Furuya et al. (U.S. Pat 5,430,816).

Referring mainly to Figure 8, Furuya et al. disclose a method of illuminating a target including transmitting light from a laser light source (1) to a proximal end (4) of a light guide bundle via a spatial light modulator (mask plate, col.24, lines 10) wherein the spatial light modulator transmits the light substantially only to cores of light guides in the light guide bundle (col.24, lines 9-14), transmitting the light from the proximal end of the light guide bundle to a distal end (6) of the light guide bundle and emitting the light from the distal end of the light guide bundle (note dashed lines in Figure 8), and illuminating the target with the light emitted from the distal end of the light guide bundle (col.17, lines 51-59).

Allowable Subject Matter

8. Claims 32, 34, 36 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Richards-Kortum et al. (U.S. Pat. 6,370,422)

Shanks (U.S. Pat. 5,514,127)

Jovin et al. (U.S. Pat. 6,399,935)

Kare et al. (US 2004/0178329)

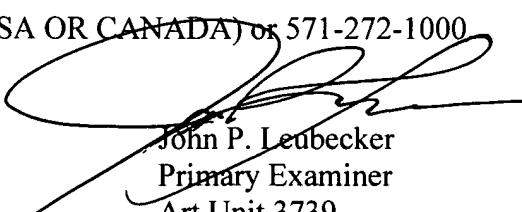
Cryan et al. (U.S. Pat. 6,487,351)

Yoshida et al. (Jap. Pat. 58-17403)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000



John P. Leubecker
Primary Examiner
Art Unit 3739

jpl